

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-29, 31-40, 42-50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As to claims 17-29, 31, 32, 38-40, 42-48, Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to an examiner is that one clue to patent eligibility under 35 USC 101 is whether or not the process is (1) be tied to a particular machine or apparatus or (2) transforms underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

The claim should recite the particular machine or apparatus to which it is tied, for example by identifying the machine or apparatus that accomplishes the method steps, or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent-eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant

extra-solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test.

In this case, the system as claimed could be a signal, there being nothing in the specification precluding such an interpretation.

As to claims 33-37 and 49-50, the various limitations appear to be just software "modules" and as such, are non-statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 17-22,24-29 ,32-40 and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PAT 4,605,081 to Helmly in view of US PAT 7,406,436 to Reisman

As to claims 17,33, Helmly discloses a computerized (fig 1) method for analyzing compliance with payload standard comprising a module for determining a first target payload (160, as best seen in fig 5), obtaining weight data for equipment (158, as best seen in fig 5), a module for comparing the two and analyzing compliance (168, 166, as best seen in fig 5) and further checks if the weight is over or under the target (col 2, lines 4-12) and a module for outputting the results (fig 4), the payloads are recorded (col 8, lines 43-46),

It would have been obvious to use the data for long term analyzing the payload as Helmly teaches the system as being used to comply with government regulations (abstract, lines 4-8) and if a particular place shows a pattern of placing a load that is

above legal limits the company would be in danger of legal action taken against it, the period of time for analyzing compliance spans multiple different hauling events (it is used whenever the truck operates with a load).

Helmly further does not teach using the system to ensure compliance with warranty requirements.

Reisman teaches collecting data on an item to ensure warranty compliance (col 37, lines 65-66, col 24, lines 1-7), it would have been obvious to use the data as disclosed by Helmly to track warranty compliance as taught by Reisman as both teach ways to ensure compliance with regulations (whether warranty or regulatory).

As to claim 40, it is done periodically (whenever the truck is carrying a load). The loading practice would be modified based on the target payload (the amount dispensed).

As to claim 49, the system performs the tasks, therefore, it would have modules.

As to claims 18, Helmly discloses analyzing compliance (168, 166, as best seen in fig 5), analyzing compliance with a second payload standard (length of truck, 164, as best seen in fig 5) not equal to the first (weight).

As to claims 19, the target payload is based on type of payload (abstract, lines 8-13), it is inherent that different payloads would have different legal limits.

As to claims 20,21, Helmly discloses obtaining the empty weight (col 2, lines 20-22), as Helmly discloses it as being used more than once, it would be done for two or more pieces of equipment of the equipment type (tractor-trailer). Helmly does not, however, teach averaging the weights of multiple equipments (fleet or not). It would

have been obvious to one of ordinary skill in the art to average the weights of multiple trucks for statistical purposes such as determining an average for all trucks of the same type.

As to claims 22 it would be inherent that a target payload is that which is added to the empty weight to achieve target payload, therefore, it would have been obvious to do this subtraction to determine the proper load.

As to claims 26, applicant has shown the percentage of acceptable overload to be old and well known in the art (paragraphs 2-6, starting on pg 1 of the specification of the instant application), as such, it would have been obvious to one of ordinary skill in the art to determine the percentages as the applicant has shown that this is well known. Compliance would have been checked using this standard.

As to claims 24, Helmly would have determined this if the payload weights were above the maximum threshold.

As to claims 27, Helmly discloses providing a compliance rating based on the comparison ("...within allowable weight", col 7, lines 43-51).

As to claims 28 Helmly determines the payload on a predetermined factor (maximum allowable weight).

As to claims 29 Helmly discloses graphically illustrating the results (fig 4).

As to claims 32, Helmly discloses determining equipment identification (col 5, lines 17-28).

As to claim 25, it would have been obvious to one of ordinary skill in the art to use the lesser of these values to ensure that the truck is compliant.

As to claims 34, 35, there is a network connection (fig 1).

As to claim 36, the output module is connected to a device to send data over a network (fig 1).

As to claim 37, there is shown to be a payload database (inherent in that the system is shown to have payload weight information, col 2, lines 4-10), a processor (fig 1), an equipment database (inherent in that there is shown to be information stored on the equipment) with payload standard information (what type of payload the vehicle can carry).

As to claims 38,46, it would have been obvious to one of ordinary skill in the art to obtain payload compliance data to check for compliance as overloading a vehicle could void the warranty.

As to claim 39, it would have been obvious to have a standard and to determine the numbers as this would quantify the results.

As to claim 42, it is old and well known in the art to know the time duration of a hauling event (there are many laws in place that require truck drivers to record their time driving to ensure they do not go over legal limits), therefore, it would have been obvious to record hauling time as this is often required by law.

As to claims 43, it would be obvious to change the numbers if they are found to not be accurate, thereby meeting the limitations as claimed.

As to claim 45, it would be obvious to use operation time as a long haul with a heavy load would be much harder on the truck than a shorter haul.

As to claim 47, the system always checks compliance, therefore, it would be over the "entire calendar period of time".

As to claim 48, it would be obvious to use the analysis for requesting warranty service as, as previously discussed, if the load was more than the warranty specifies for that vehicle (even if it is legal for Dept. of Transportation purposes), then this would void the warranty and would mean warranty service would not be provided.

As to claim 50, Helmly discloses tracking underages (as previously discussed), it would be obvious to further parse for percentages to see if a particular operator or station routinely underloads vehicles as this would waste money.

Claims 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmly in view of Reisman as applied to claims 17-22,24-29 ,32-40 and 42-50 above, and further in view of US PAT 7,136,787 to Schlessinger et al. (Schlessinger).

As to claims 23 and 31, Helmly teaches a method and system as discussed above. Helmly does not, however, teach using statistical analysis, such as standard deviation, to refine the data.

Schlessinger teaches using standard deviation for statistical analysis (col 17, lines 38-40, claim 36, claim 53), therefore, it would be obvious to use standard deviation and statistical methods as taught by Schlessinger to refine the data of Helmly to ensure accuracy of computations to ensure compliance with the law on all payloads, as Helmly does not teach using the system only once, it would be obvious to track overloads so as to ensure proper payloads in the future to reduce the risk of fines.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. FISHER whose telephone number is (571)272-6804. The examiner can normally be reached on Mon.-Fri. 7:30am-5:00pm alt Fri. off.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Fisher/

Examiner, Art Unit 3689

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